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ABSTRACT

This instructional manual for the use of vocational educators in Montana describes a continuing enrollment/exit/follow-up computerized survey of vocational education and provides instructions for its implementation. The survey is intended to make available information which will provide insights for evaluating and improving vocational education programs. The system has been devised to operate as follows. Upon a student's enrollment in a vocationally oriented course of instruction, the school records information on an "entry card" which is transmitted to the Research Coordinating Unit (RCU) where the data is encoded and transferred to magnetic tape storage for subsequent computer use. Any change in information is submitted to the RCU by completion of a "change card." Upon exit of a student, pertinent information is recorded as an "exit card" and transmitted to the RCU. "Follow-up cards" are transmitted to ex-students 6 months, 2 years, and $\bar{4}$ years after their dates of exit and, on return, are transmitted to the RCU. Each 6 months a computer output report is sent to each participating school. An annual report summarizing all general information is compiled and published after the conclusion of each school year, (JK)

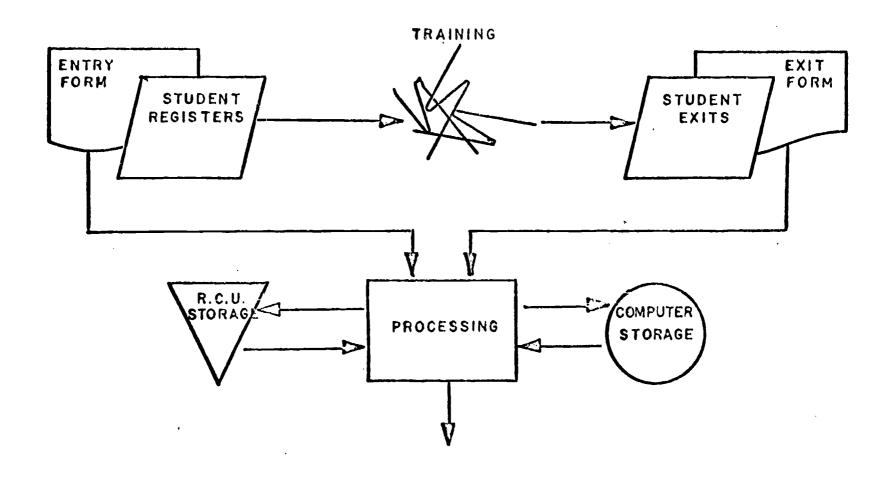


MONTANA

VOCATIONAL EDUCATION

ENROLLMENT/EXIT/FOLLOW-UP

SURVEY



RESEARCH COORDINATING UNIT

OFFICE OF THE SUPERINTENDENT OF PUBLIC INSTRUCTION

DOLORES COLBURG, SUPERINTENDENT

HELENA, MONTANA 59601

NOVEMBER 1969

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE OFFICE OF EDUCATION

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VT010325

STATE OF MONTANA

SUPPERINTENDENT OF PUBLIC INSTRUCTION



HELENA 50601

DOLORES COLBURG

November 7, 1969

Montana Vocational Educators:

Concurrent with increased federal and state emphasis and funding for more effective, meaningful vocational education, reporting requirements have also been expanded far beyond previous demands. Through the use of electronic data processing as envisioned in this continuing data collection system, we have every reason to believe that computer generated reports will not only be more accurate and efficient but will also relieve state and local education agencies from many onerous tasks in the manual assembly of recurring reports.

Further, preliminary tests of the system reveal that much of the information to be compiled is of value and has long been desired by local school administrators. I trust, therefore, that this instructional manual will be readily accepted and implemented.

While these instructions appear sufficiently detailed, some questions will inevitably arise. Any inquiries about the system may be addressed to Mr. A. J. Schultz, Research and Development, in my office. Mr. Schultz may also be reached by telephone at 449-2023 or 449-2024.

Sincerely,

Salares Calling
DOLORES COLBURG

State Superintendent



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I. INTRODUCTION

With the passage of the Smith-Hughes Act of 1917 and its provisions for education in home economics and training for agricultural and industrial occupations, public education accepted a formal role in vocational preparation, especially at the secondary school level.

Subsequent federal acts, augmented by state efforts, expanded this role in the public sector by providing for construction of facilities, equipment, expansions of vocational curricula, extending opportunities for post-secondary training, adult education, and personnel with special needs; even ancillary services such as counseling, experimentation, research, and teacher training were added as functions of public education.

Public Law 90-576 (Vocational Education Amendments of 1968) provides a great deal more in appropriated funds for the support of vocational education. However, the Act also delineates, with much greater specificity, the purpose and ends toward which such funds may be expended; e.g. the percentages to be applied for the disadvantaged, handicapped, post-secondary, and the like.

Thus, not only must more stringent accountability be applied, but greatly expanded research efforts must be made to properly assess and evaluate actual student needs and curricular revisions to adapt vocational education to the world-of-work.



II. PURPOSE

"The Congress finds that it is necessary to reduce the continuing seriously high level of youth unemployment by developing means for giving the same kind of attention as is now given to the college preparation needs of those young persons who go on to college, to the job preparation needs of the two out of three young persons who end their education at or before completion of the secondary level, too many of whom face long and bitter months of job hunting or marginal work after leaving school."

The quotation above is cited directly from the 1968 Vocational Education Act and epitomizes the major purpose of the continuing survey described in the succeeding pages.

Few would dispute altruistic efforts to make Montana's Vocational Education programs both progressive and comprehensive; to broaden the concept of a total education for personnel of all ages; to serve individuals, the state, and the nation, by offering the expanded programs and diversified courses essential to equip personnel trained for gainful employment. But, with limited resources and job opportunites, it is important that the thrust of such efforts be based on sound, logical analysis and judgement.

In the face of rapidly changing technology, occupations, and mobility of the work-force, it is evident that training courses and facilities to match vocational needs cannot remain static. Rather, vocational training must not only be constantly revised to meet current needs but, in fact, must often anticipate projected changes in the labor market by planning and formulating programs to match future needs.

In the interest of assuring occupational education programs of the highest possible quality, it is essential that data and information be



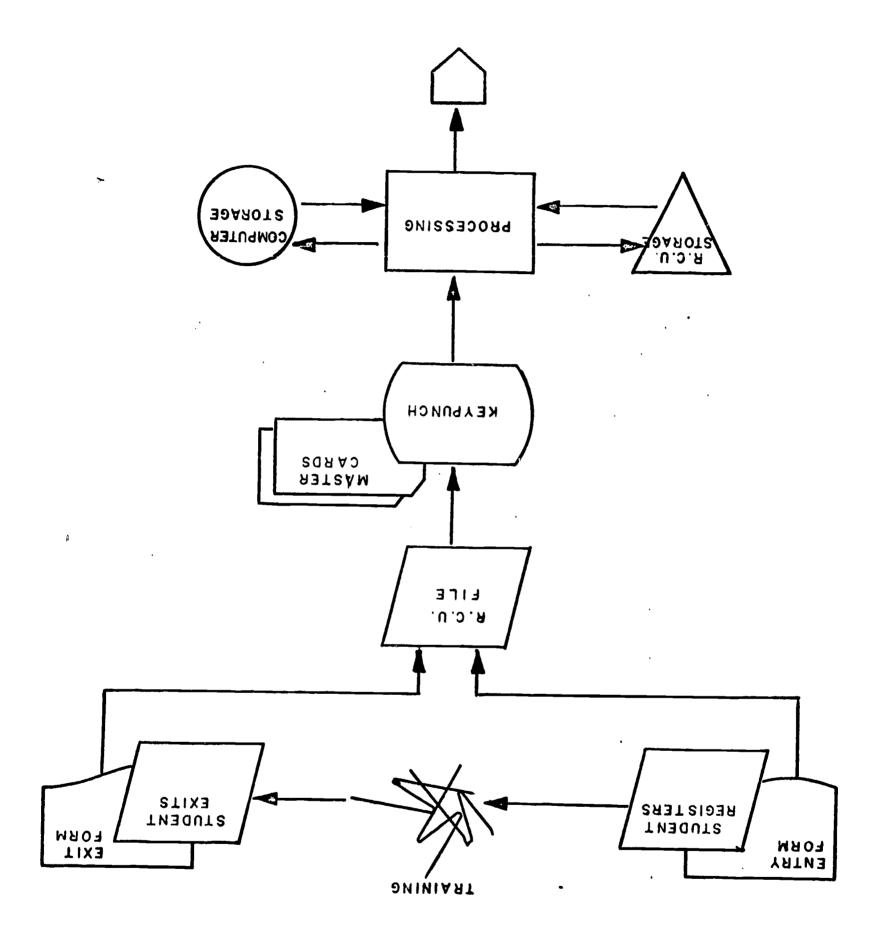
gathered from state-wide sources to determine the employment opportunities available and the types, locations, and extent of training courses necessary to achieve maximum benefits to the individual student as well as employers and industry-at-large. The enrollment/exit/follow-up, computerized survey envisioned (figures 1 & 2, pages 4 & 5), provides immediate access to basic data and a means of utilizing information from former students for assessment and evaluation of current programs. Through this feedback, schools, counselors, and instructors are afforded insights upon which of their courses may be upgraded or otherwise improved.

In addition to the utilization described above, the data developed may also be used collaterally, as follows:

- 1. To justify and enhance vocational education as "training for gainful employment:" to prospective students, parents, and the public-at-large.
- 2. To provide data on drop-outs, employment trends, placement activities, area needs, employer information, and the like.
- 3. To provide assessments to local and state boards and committees as evidence of services provided by schools, effectiveness of programs, needs for revision, reorganization, and establishment or elimination of certain programs or courses in specific areas.
- 4. To provide facts and figures for public information.
- 5. To alleviate follow-up and multiple reporting requirements at the local level as well as facilitating state accountability.
- 6. To provide ready, factual data to members of legislatures as a basis for obtaining necessary legislative action and support.
- 7. To provide adequate planning data for concerned educational agencies.







Enrollment/Exit/Follow-Up System

Figure 1

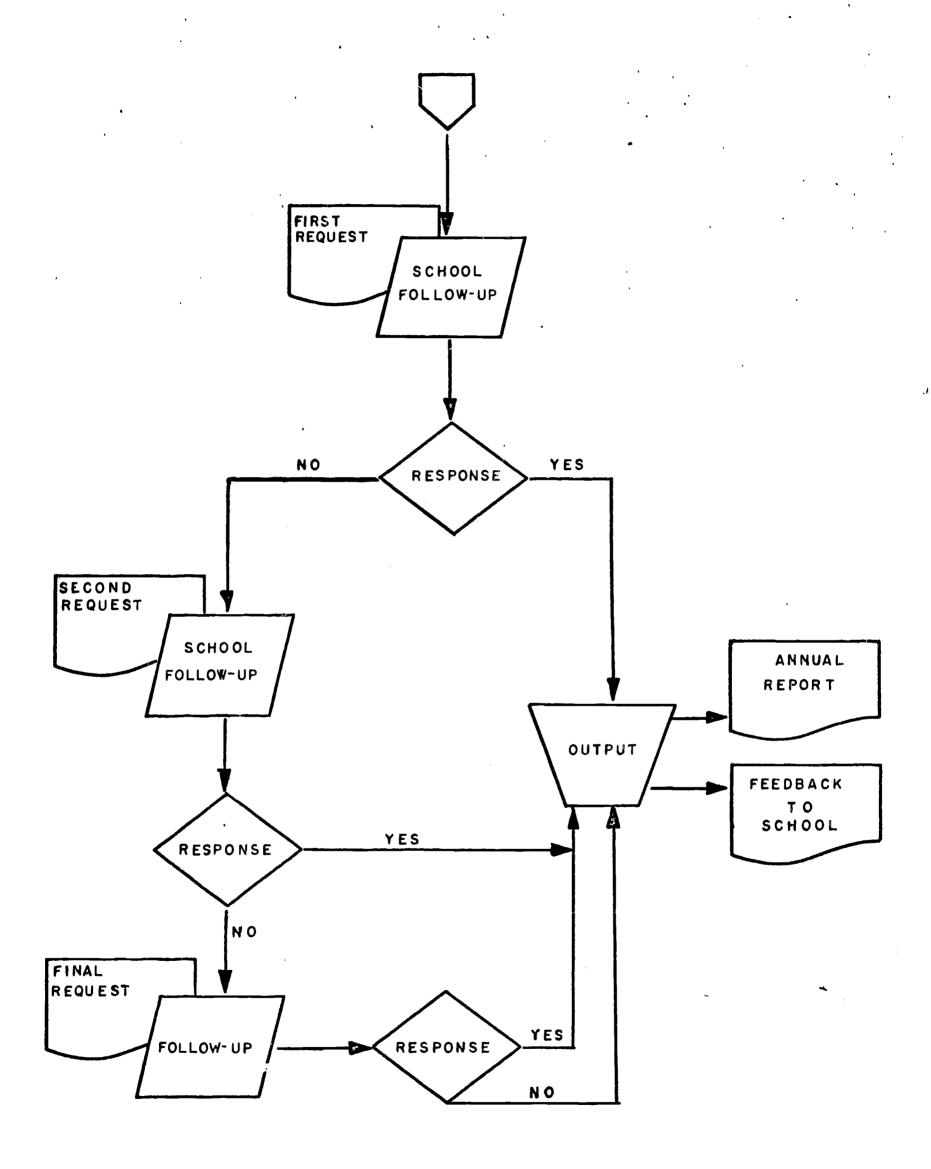


Figure 2
Enrollment/Exit/Follow-Up System

III. GENERAL PROCEDURE

The enrollment/exit/follow-up survey described herein is intended to cover only those students enrolled in vocational programs funded by state and/or federal vocational education funds. Data cards shall be completed on every student enrolled in such programs. Personnel enrolled in college preparatory, academic, general, or vocational courses which are not funded through vocational education funds will not be represented on data cards.

The collection of accurate information is essential to the validity of any survey. In this effort, the instruments utilized are standardized data cards. Ease in mailing, filing, encoding, and general handling dictated this choice. Further, to the maximum extent possible, the required information may be indicated with a check-mark ("" or "X"), thereby reducing typing or printing to a minimum.

Specific instructions for the completion and submission of the data cards follow in succeeding pages of this publication. In a broad overview, the system is intended to operate in the following manner:

Upon a student's enrollment in a vocationally oriented course of training, the school records information on an "Entry card", RCU Form 1 (see figure 4, page 23). This form is transmitted to the Research Coordinating Unit, Office of the State Superintendent of Public Instruction, where the data is encoded and transferred to magnetic tape storage for subsequent computer use. Other than a change in the course of training, should any of the information on the student be changed, such information shall be submitted to the RCU by completion and transmission of a "Change card", RCU form 1a (figure 5, page 25).

Upon the exit of a student from a course of training for any reason, whether the course of training was completed or not, pertinent information shall be recorded and transmitted to the RCU on an "Exit card" RCU Form 2 (figure 6, page 30).

Six months after the date of exit of a student from a course of training, the School shall transmit "Follow-Up cards" RCU Forms 3a and 3b (figures 7 & 8, pages 33 & 34) to the ex-students concerned. Normally, the forms will be transmitted to the exited students through mailings utilizing a letter of request under the school's letterhead enclosing a stamped, self-addressed envelope for return of the forms. If completed follow-up forms are not returned to the school within two weeks, the mailings will be repeated twice at two week intervals. Schools are encouraged to extract information from completed follow-up cards for their own analysis and use; however, the cards shall not be unduly delayed in retransmission to the RCU. Within one month after a non-responsive third mailing, the school shall provide the RCU with a list of non-respondents.

Ex-students will be followed-up in a similar manner two and a half years and four and a half years from the date of exit from a course of training. However, the forms for these subsequent years have not yet been fully developed since it is anticipated that experience with the system over the next year will affect both formats and reporting procedures.

Each six months a computer output report will be transmitted to each participating school. This "feed-back" report will represent information in the data bank on the school's current enrollments, exited

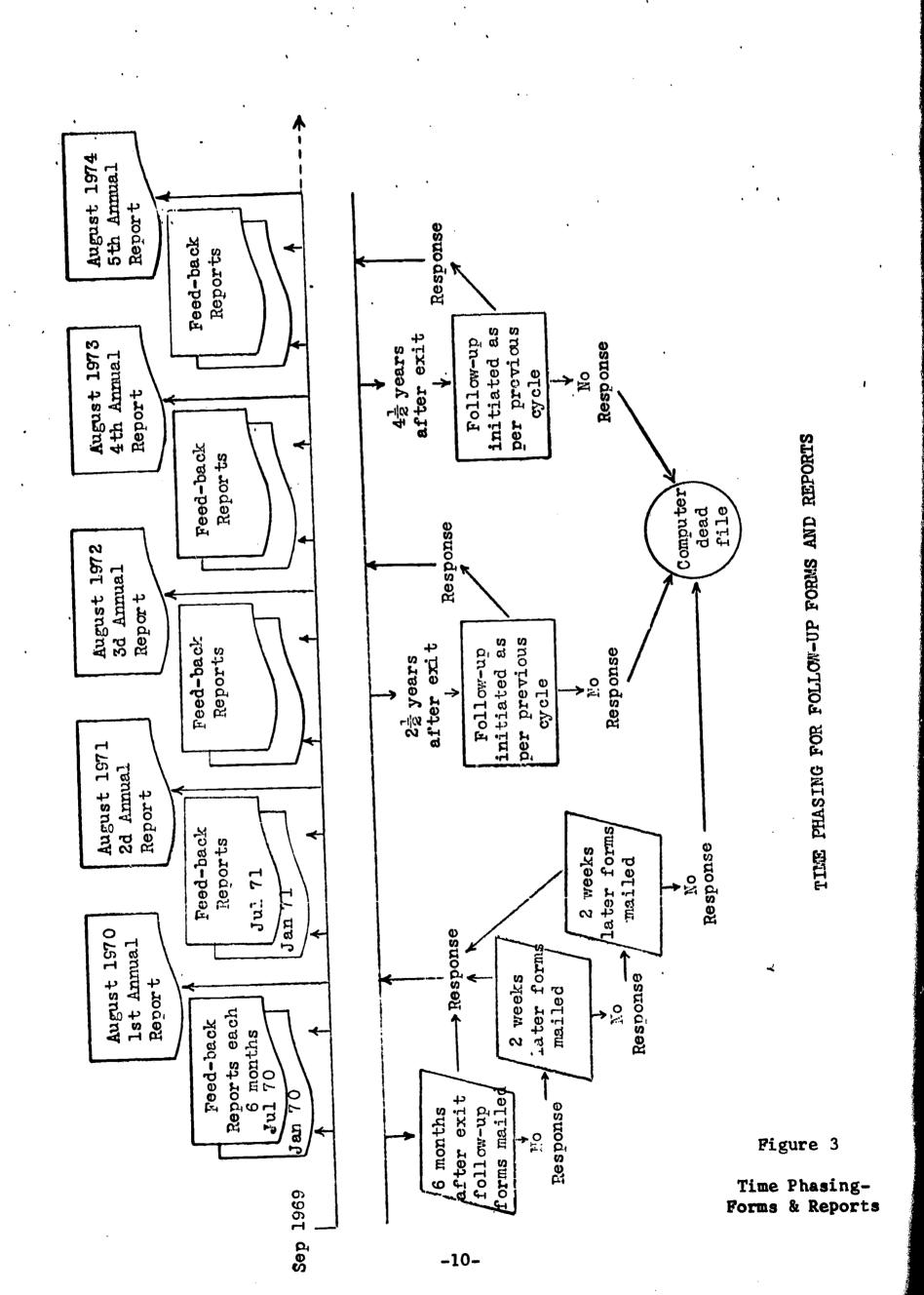
students, etc., for the preceding six months. (For the proposed format of this report see figure 9, page 36.) An annual report summarizing all general information on Montana's Vocational Education will also be compiled and published after the conclusion of each school year. (Follow-Up and report cycles are represented graphically in figure 3, page 10.)

A high rate of returns from respondents is essential to render statistical significance and validity to the findings of this enrollment/exit/follow-up system. It is necessary, therefore, that all vocational students be made fully aware of the mechanics of the system as well as the prime need for their eventual follow-up response. In like manner, they must be positively assured that the information submitted is completely confidential and rendered anonymous through computerization. For these reasons, an indoctrination session on the system is recommended for all vocational students shortly after their enrollment.

While no formal procedure for completion of the data cards is prescribed and the method employed is left to the discretion of the local school authorities, the following suggestions are offered. Other than completion of the "Follow-up cards" (RCU Forms 3a & 3b), a student should not directly make entries on the cards—all entries on the "Entry", "Change", and "Exit" cards (RCU Forms 1, 1a, & 2) should be the responsibility of school authorities. Some form of administrative control in the school's office will be required; therefore, the following sequence appears to be a logical pattern:

Since some of the information required on the Form 1 is readily

available in the school's files, a control log and the initial entries can be completed by the administrative section; name, address, school code, etc. The entry cards may then be turned over to the students' instructors and counselors for completion and confirmation of the more individualized entries; marital status, employment, salary, etc. After completion by instructors and counselors, the cards are returned to the administrative office where they are rechecked for adequacy and accuracy, logged out, batch assembled, and transmitted to the RCU. Similar procedures should be initiated for completion of "Change" and "Exit" cards. Logs should also be established in the administrative office to assure the timely mailing, receipt, and transmission of the "Follow-Up" cards.



ERIC

IV. ENROLLMENT

Vocational programs supported by state and federal funds must be continually reviewed, evaluated, justified, and sustained through a number of various reporting demands. This overall system is designed to fully meet such requirements through computerized recapitulations of individual one-time reports, thus relieving schools of much of the multiple, recurring reporting procedures which are presently required.

In the interest of adequacy and accuracy, it is imperative that information on all students engaged in vocational training be complete and maintained in current status. Therefore, school authorities shall assure that the required data cards on vocational students (except MDTA students) are completed and transmitted to the RCU not later than two weeks following the date of enrollment, change of status, or exit from a vocational curriculum. Data cards may be batch assembled but the package transmitted will contain only data cards or correspondence pertaining to the enrollment/exit/follow-up system. Outer covers will be addressed as follows:

Research Coordinating Unit
Office of the Superintendent
of Public Instruction
State Capitol Building
Helena, Montana 59601

VO-ED DATA CARDS

Enrollments into vocational training are recorded on an "Entry card", RCU Form 1, (Figure 4, page 23). The Form 1 is printed front and back on yellow paper stock. The front face of the card is used to record information peculiar to the individual student. The reverse side of the card is utilized for recording information on the school,



course, type of training, etc. Other than information which can be indicated by a check-mark, all entries should be typewritten or printed. Explanatory notes on all items are listed below. Instructions for each item are numbered to facilitate references.

The following instructions pertain to information requested on the front face of the RCU Form 1:

- 1. SOCIAL SECURITY NUMBER. Type or print the student's complete
 Social Security Number. Example: 505-09-1112. Since the very nature
 and purpose of vocational training is preparation for gainful employment, application for and receipt of a Social Security Number is a
 first prerequisite to any form of occupational training. Further,
 magnetic tape data storage and processing of the information developed
 in this survey requires numerical coding. Use of a Social Security
 Number enables such coding along with assuring anonymity and protection
 of confidential material.
- 2. STUDENT'S NAME. Type or print in blanks indicated. In the event student has no middle initial, enter: NMI. While names will not be associated nor directly correlated with data, they are initially necessary for cross-checks against erroneously entered social security numbers and may be utilized to facilitate or clarify correspondence with schools concerned.
- 3. HOME ADDRESS. Enter completely as indicated. Addresses must be maintained in current status to enable follow-up.
- 4. HOME PHONE. Enter complete number. In the event of no phone, indicate: NONE.

- 5. YEAR OF BIRTH. Enter in four digits. Example: 1946.
- 6. SEX. Enter "M" or "F", as applicable.
- 7. MARITAL STATUS. Check ">" or "X" applicable status.
- 8. NUMBER OF DEPENDENTS. Enter only the number dependent upon the student for support. Examples: A student with no dependents: NONE.

 A student with a dependent wife and one child: TWO.
- 9. CURRENTLY EMPLOYED. If "NO" is checked, no further entry is necessary. If "YES" is checked, either "Full-time" or "Part-time" must also be indicated.
- 10. MONTHLY SALARY. If student is unemployed, enter: NONE. If student is employed, enter total monthly salary before deductions.
- 11. CIRCLE HIGHEST GRADE COMPLETED. Circle only the highest grade of formal schooling completed as evidenced by school records or transcripts. "PG" = Post baccalaureate graduate work.
- 12. HANDICAPPED. In the past, school authorities have recognized characteristics and attributes displayed by students as handicaps to the learning process, but have been loath to designate such handicaps or individuals. Fear of stigmatizing the student by placing him in an undesirable category, apprehensions of parental disfavor, and even fear of civil suit have been offered as reasons for such reluctance. Nevertheless, through the very nature of the teaching/learning process, there is a specific duty incumbent in the professional role of the teacher and/or counselor to properly assess and identify such handicaps in individuals in order that reasonable corrective efforts might be afforded.

This duty is further emphasized by the fact that Congress has specified that certain percentages of funds allocated to vocational education must be utilized specifically for the education of the "handicapped" and the "disadvantaged" and must be so accounted for in federal reports. Since the information reported on this data card is accorded confidential status between the local school system and the Office of the Superintendent of Public Instruction, rendered anonymous through computer storage, and can only accrue benefits for the students affected, there should be no hesitancy in properly marking the data card to reflect impediments to effective learning.

It is further recognized that, in the final analysis, factors which are detrimental to a student's progress are best assessed by the professional teachers, counselors, and school authorities who are in daily contact with the student—and their judgement will be respected. The following are general conditions which impede learning. Since there can be no absolute measure of these conditions, the final determination is left to the discretion of the school authorities.

- a. SIGHT. Any optical aberration or impairment of visual acuity which impedes the student's learning abilities. Examples: Cross or wall eyes, astigmatism, near or farsightedness, etc. Note that, is some cases, even though the student wears corrective glasses, visual problems may still detract from the student's ability to learn at a normal rate or will be a continual problem in seeking employment.
- b. HEARING. As above, record for any aural problem discerned.
- c. SPEECH. Record for any faulty speech patterns whether

manifested physically (cleft palate, hare-lip, etc.), by abnormality (stuttering, stammering, etc.), or by subnormality (in-adequate vocabulary, inability to adequately express ideas, etc.).

- d. SLOW LEARNER. Record for any student who demonstrates an abnormally slow learning rate whether from known or unknown causes. This includes minor retardation, students with learning disabilities, and the so-called "dull-normal".
- e. CHRONIC ILLNESS. Record for any student who is subject to chronic illnesses which result in frequent absences or otherwise impedes learning and progress toward ultimate employment.
- f. EMOTIONALLY DISTURBED. Record for any emotional disturbance discerned (causes known or unknown) which is detrimental to the student's progress. Note that emotional disturbances are frequently related to other conditions listed under "HANDICAPPED" and "DISADVANTAGED": Illness, physical impairments, academic deficiencies, home environment, and the like.
- g. PHYSICALLY IMPAIRED. Record for the more subtle impediments such as faulty coordination, deficiencies in manipulative control, dexterity, debilitation, etc., as well as the more obvious crippling defects; withered limbs, pronounced limp, amputations, and the like.
- h. MENTALLY RETARDED. Record only those clinically diagnosed as retarded.
- i. OTHER. Students may be handicapped for reasons other than those listed above. However, if "OTHER" is checked, briefly

specify the condition which presents the handicap.

- 13. DI SADVANTAGED. Refer to explanatory notes in paragraph 12 above.
 - a. ACADEMIC DEFICIENCY. Record for those students who are deficient in a certain subject or subjects and require remedial work in order to progress through a course of training; reading, mathematics, etc. Also record for students who are chronic "underachievers".
 - b. GEOGRAPHIC ISOLATION. Isolation may be determined as applicable to the school, community, or individual student. Examples: School--very small school population, inability to recruit and retain well qualified teachers, inability to initiate and maintain diverse vocational programs, etc. Community--low population and/or tax base, little to no employment opportunities to absorb vocational graduates, etc. Student--must travel appreciable distances from home to school, cannot participate in extracurricular or social activities, has needs and/or capabilities which cannot be met within the school's curricula, etc.
 - c. ETHNIC MINORITY. On and off-reservation Indian, Negro, Mexican-American, migrants, etc.
 - d. INSTITUTIONALIZED. Students in correctional and rehabilitative institutions, orphanages, etc. Also includes students transported from institutions to nearby schools.
 - e. SOCIO-ECONOMIC. Record for students from sub-cultural and/or very low income environments.

- f. HOME ENVIRONMENT. Record for students whose home environment appears to be detrimental to their progress; broken homes, foster parents, generally unsatisfactory home conditions, neglected children, unmet cultural, social, dental, medical, nutritional needs, etc.
- g. PERSONALITY OR CHARACTER TRAITS. Record for students who display and are impeded by deficiencies in personality or character: chronic cheating or stealing, lack of cooperation, inability to get along with teachers and/or fellow-students, a history of delinquencies and/or disciplinary problems, etc.
- h. OTHER. Students may suffer a disadvantage for reasons other than those listed. However, if "OTHER" is checked, briefly specify the condition which presents the difficulty.

The following instructions pertain to information requested on the reverse side of the RCU Form 1.

14. OCCUPATIONAL COURSE ENTERED. Enter the six digit course code which corresponds to the primary occupational training in which the student is enrolled. Tables listing the course codes are contained in Appendix A, pages 37 through 55.

A unique feature of this reporting system lies in the fact that a student is reported only in the course of training which corresponds to his primary vocational choice. For example, a high school student enrolls in a two year program of training in "Auto Mechanics, General". During the same two year period the student also enrolls in some elective courses in Business and Agriculture. Since, in the

case cited, the principal aim of the student's vocational program is to develop employable skills as an automotive mechanic, only one "Entry card" shall be submitted on this student reflecting his enrollment in "Auto Mechanics, General". Therefore, the course code entered will be "170301", the code listed on page 51, Appendix A. Neither additional entries in this space nor additional cards which reflect the elective courses in the 010000 and 040000 series, Agriculture and Business, will be submitted. Thus, duplications in vocational education counts are eliminated and more effective correlations and follow-ups in ex-students' subsequent employment patterns are enabled.

- N.B. The course codes listed in Appendix A were based upon USOE codes published in 1966. However, the codes were developed and expanded to make the system compatible with Montana's needs in vocational education. Therefore, it is essential that only the coding system listed in Appendix A be utilized in the administration of this enrollment/exit/follow-up survey.
- 15. COURSE TITLE. Enter the descriptive title of the primary vocational training course in which the student is enrolled. It is not essential that this title agree exactly with the titles listed in Appendix A, but the title and the end occupation anticipated must agree with the course code assigned in the previous item.
- 16. DATE OF ENTRY. Enter the date of current enrollment numerically in the applicable spaces. Example: "9 15 69" for September 15, 1969.
- 17. TOTAL COURSE REQUIREMENT IN WEEKS. The purpose of this entry is to enable computation of an anticipated date for receipt of an exit

card rather than a measure of class time. However, because training programs which extend over one year and include vacation breaks in the interim present peculiar problems in accounting, two distinct methods of computation are necessary:

- a. FOR COMPLETE TRAINING PROGRAMS WITHOUT A VACATION BREAK BETWEEN ENROLLMENT AND TERMINATION. Enter the total course requirement in calendar weeks. Example: A student enrolls in a
 course on January 3, 1970 and the complete course will terminate
 on December 22, 1970 without an intervening summer vacation.
 Enter: 51.
- b. FOR TRAINING PROGRAMS WITH AN EXTENSIVE VACATION BREAK BETWEEN ENROLLMENT AND TERMINATION. Enter the total number of
 calendar weeks of training included within the current school
 year. Example: A student enters a two year training program
 on September 15, 1969. The course is interrupted for a twelve
 week summer vacation on June 30, 1970. Enter: 39. (Note that
 short holiday breaks and reregistration between quarters or
 semesters are not considered major interruptions of training.)
- 18. SCHOOL LEGAL ENTITY CODE. A complete list of school code numbers for all Montana Schools offering reimbursable vocational courses is contained in Appendix B, pages 56 through 62. Enter appropriate four digit code number in the space provided.
- 19. <u>LEVEL OF COURSE</u>. The following definitions apply to entries to be made in this section:
 - a. HIGH SCHOOL. Applies to students enrolled in a High School

- on a <u>full-time basis</u>. Also check applicable grade level. It is recognized that some high school students are provided vocational training at a nearby Vo-Tech Center. Nevertheless, these personnel are "High School" students and reporting requirements for these students remain the responsibility of the High School in which they are enrolled.
- b. POST SECONDARY. Applies only to students enrolled in a Post Secondary School on a <u>full-time basis</u>. Such schools include Post Secondary Vo-Tech Centers and similar Post Secondary Schools operated by High School Districts, Junior and Community Colleges, and the less than baccalaureate vocational training courses offered at Northern Montana College. Also check appropriate year level of training.
- c. ADULT. Many students attend vocational courses offered by High School Districts and Post Secondary Schools on a <u>less than</u> full-time basis. For the purpose of this survey, such less than full-time enrollment will be designated as Adult Education. Also indicate whether the training is "Preparatory"--preparing the student for intial entry job skills, or "Supplementary"--either upgrading skills already possessed or further enhancing employability through additional training.
- 20. FUNDED BY. "VO-ED" will be checked for all students whose training is supported through state or federal vocational education funds.

 MDTA students are frequently "slotted-in" to vocational courses operated within school systems. However, the accounting responsibility for MDTA students remains solely with the MDTA Supervisors within the

Office of the Superintendent of Public Instruction. In effect, school authorities shall assume no direct responsibility for accounting for MDTA students, but will cooperate with MDTA Supervisors when information is solicited.

- 21. TYPE OF TRAINING. Check appropriate information in accordance with the following definitions:
 - a. APPRENTICE. Apprentice training is designed for persons 16 years of age or older and who are covered by a written agreement with an employer, which apprenticeship agreement is approved and under the jurisdiction of the Montana State Apprenticeship Council and provides for not less than 4,000 hours of reasonably continuous employment. Training shall include a minimum of 144 hours of related and supplemental instruction under state and local boards responsible for vocational education and according to the Montana Apprenticeship Law.
 - b. EXEMPLARY. Exemplary programs shall enable educational agencies to explore, develop and demonstrate innovative concepts without inhibiting restrictions imposed by traditional programs for vocational education and shall thereby encourage, stimulate, promote and implement creative and sensitive novel models for occupational systems of high quality designed to prepare individuals for their next role in life. Exemplary programs are conducted according to Part D of the Vocational Education Amendments of 1968 and Section 6 of Part I of the Montana State Plan for Vocational Education.
 - c. RESIDENTIAL. A residential school is an educational institution in which students of vocational education are boarded and lodged as well as educated. Residential schools are designed to provide vocational education (including room, board and other necessities) for youths, at least fifteen years of age at the time of enrollment, who need full-time study on a residential basis in order to benefit fully from such education. Residential vocational education will be conducted according to Part E of the Vocational Education Amendments of 1968 and Section 7, Part I of the Montana State Plan for Vocational Education.
 - d. UNDER CONTRACT. A vocational educational program is under contract when there is an indication that instruction or an instructional service is provided through a contractual relationship between the State Board, a school or school system and another school, school system or other agency.
 - e. COOPERATIVE (DE). Cooperative education (DE) is designed to provide formal classroom training which is integrated with business experiences in a business laboratory station to achieve

career objectives for students enrolled in the field of distributive education. The experience of the student-trainee is coordinated between the institutional training and the on-the-job work by a qualified distributive education teacher-coordinator and the business laboratory station employer. Cooperative education (DE) is funded under Part B of the Vocational Education Act of 1968.

- WORK/STUDY. Work-study programs are designed to provide work opportunities for full-time vocational education students who need financial help to commence or continue their vocational education pursuits. Employment under the work-study program will be furnished only to a student who: (1) has been accepted for enrollment or, if he is already enrolled, is in good standing and in full-time attendance as a full-time student in a program which meets the standards prescribed by the State Board and the local educational agency for vocational education programs under the Vocational Education Amendments of 1968; (2) is in need of the earnings from such employment to commence or continue his vocational education program; and (3) is at least fifteen years of age and less than twenty-one years of age on the date of the commencement of employment and is capable, in the opinion of the appropriate school authorities, of maintaining a good standing in his school program while employed under the work-study program. Work-study programs will be conducted according to Part H of the Vocational Education Amendments of 1968 and Section 10, Part I of the Montana State Plan for Vocational Education.
- g. COOPERATIVE WORK/STUDY. Cooperative work/study is a program of vocational education for persons who, through a cooperative arrangement between the school and employers, receive instruction. This includes the required academic courses and related vocational instruction by the alternation of study in school with a job in a related occupational field. These two experiences must be planned and supervised by qualified cooperative education school coordinators and employers so that each contributes to the student's education and to his employability. Work periods and school attendance may be on alternate half days, full days, weeks or other periods of time in fulfilling the cooperative vocational education work/study program.
- 22. NAME AND ADDRESS OF SCHOOL. Self explanatory.

SOCIAL SECURITY NUMBER:	**************************************		STU NAM	DENT'S	Last	· · ·	FI	rst		M	г
HOME ADDRESS:	Number	r Street	City	State	ZIP Cade		HOME PHONE				
YEAR OF BI	RTH	SEX: Mor F	MARITAL STATUS	Single Married Widowed	Divorced Separated	DE	MBER O PENDEN applicable				
CURRENTLY EMPLOYED:	Yes No	Full-time Part-time	MONTHLY SALARY:	\$	Circle highest O grade completed 11	1 2	3 4 13	5 14	6 7 15	8	9 PG
HANDICAF Sight Hearing Speech Slaw Lear Other (Spe	ner ecify):	Chronic Ilines Emotionally I Physically Ir	ons below) s disturbed npaired arded	Ac Ge Et In	ademic Deficiency ographic Isolation hnic Minority stitutionalized her (Specify):	If chec	Hai	sans b cio-Ec ne Er sanal		ent	
R.C.U. FOF	RM 1	Jan 69	ENTRY-	- STUDENT	IDENTIFIER		DD-9 10672-	0			

OCCUPATIONAL COURSE ENTERED: 6 Digit Course Code	COURSE TITLE:	
DATE OF ENTRY INTO COURSE: Month Day Year	TOTAL COURSE REQUIREMENT IN WEEKS: ———	SCHOOL LEGAL ENTITY CODE:
I,EVEL OF HIGH SCHOOL COURSE: 9th 11th Check as applicable 10th 12th	POST SECONDAR Ist year 2nd year	ADULT Oreparatory Supplementary
FUNDED VO-ED TYPE OF TRAINING: BY: MDTA If applicable	Apprentice Under cont Exemplary Caoperativ Residential Work/Studential	e (DE) Work/Study
NAME AND ADDRESS OF SCHOOL:		
00-3 10673-0	ENTRY COURSE IDENTIFI	ER

Figure 4

Entry Card, RCU Form 1

V. CHANGES

Between enrollment and ultimate exit from a course of training, provisions for changes, new information, and correction of errors, must be enabled. Examples: Conditions which qualify the student as "handicapped" or "disadvantaged" are frequently ascertained only after a student has spent considerable time in a course of training. Changes also occur in addresses, marital and dependent status, etc. In this system, such information will be transmitted by a "Change card", RCU Form la, (Figure 5, page 25). The Form la is identical to the Form 1 except for the over-printed word "CHANGE" across the front face and the color of the card stock--pink.

School authorities will effect changes and corrections to previously submitted information by transmittal of a "Change card" to the RCU. All items on the front and reverse sides of the form shall be completed in accordance with instructions contained in the preceding Section IV, ENROLIMENT. This will enable complete erasure of the information previously submitted on the individual student which is stored on magnetic tape and replacement by the revised, more current and accurate data.

Note that should a student drop a primary course of training and enroll in another primary occupational course, such an action may not be recorded by submission of a "Change card". Such an action constitutes an "EXIT" rather than a change and will effected by submission of an "Exit card", RCU Form 2, on the training dropped and an "Entry card", RCU Form 1, on the new program of training entered.



SOCIAL SECURITY NUMBER:	· · · · ·		i T	TUDENT'S AME: -	Last		First		MI	
HOME ADDRESS:	Number	Street	Cit	ty State	Zip Code		HOME PHONE:			
YEAR OF BIR	SEX:	i i	MARITAL STATUS	Single Married Widowed	Divorced Separated	DE	MBER OF PENDENTS	:		
CURRENTLY EMPLOYED:	Yes (Full-time Part-time	MONTH SALARY	· · · · ·	Circle highest O grade completed 1	1 2	. 3 4 5 13 14	6 7 15	8 9 16	IO PG
HANDICAPI Sight Hearing Speech Slow Learn Other (Spee	er \odot	mecked, indica more reason Chronic Illness Emotionally Di Physically Im Mentally Reta	ns below) s isturbed apaired	Ad Ge En		If check	Home E	below) Economic Invironme	ent	
R.C.U. FOR	M la Jan (69 MXV au di di di di di di di di	ENTR	YSTUDENT	IDENTIFIER	'Aug 18' dire during sangu sa	DD-8 10669-0		t eternion de li	

· · · · · · · · · · · · · · · · · · ·	والمعارضة والمعارضة والمعارض المراسية والمعارضة والمعارض	CANAGES SECTION OF THE PERSON AND ASSESSED SECTION OF THE SECTION
OCCUPATIONAL COURSE ENTERED: 6 Digit Course Code	COURSE TITLE:	
DATE OF ENTRY INTO COURSE: Month Day Year	TOTAL COURSE REQUIREMENT IN WEEKS: SCHOOL LEGAL ENTITY CODE	
I,EVEL OF HIGH SCHOOL COURSE: 9th 11th Check as 10th 12th	POST SECONDARY O lst year 2nd year	ADULT Oreparatory Supplementary
FUNDED VO-ED TYPE OF TRAINING: BY: MDTA If applicable	Apprentice Under contract Exemplary Cooperative (DE) Residential Work/Study	Cooperative Work/Study
NAME AND ADDRESS OF SCHOOL:	•	
DD - \$ 10673-0	ENTRY COURSE IDENTIFIER	

Figure 5

Change Card, RCU Form la

VI. EXITS

Terminations of primary courses of training will be recorded through submission of an "Exit card", RCU Form 2, (Figure 6, page 30). The Form 2 is single-faced and printed on orange paper stock. The following explanatory notes apply to entries to be made on Exit Cards.

- 1. SOCIAL SECURITY NUMBER. Type or print the student's complete Social Security Number. Example: 505-09-1112.
- 2. LAST NAME. Type or print student's last name.
- 3. DATE OF EXIT. Enter numerically the last date student attended class in the primary course of training. Example: "12 3 69" for December 3, 1969.
- 4. COURSE CODE. Enter the same six digit code number assigned to the course of training as recorded on the student's "Entry card", RCU Form 1 (reference Sec. IV, para. 14, and Appendix A). This code comprises the occupation for which the student was being trained and against which follow-up correlations will be made.
 - a. EXCEPTION. It is possible that a student may not be considered as qualified for job entry into the occupation for which he trained but is considered capable of entry into a job requiring lesser skill in the same occupational field. Example:

 A student had been enrolled in a course designed to train him for job entry as a "Computer Programmer—Code 140203". Upon exit from training, the instructor considers the ex-student incapable of performing as a "Programmer" but sufficiently qualified for employment as a "Computer Operator—Code 140204". In



such event, "140204" may be entered as the Course Code. N.B.

Such substituted code entries are permissable only if the first four numbers of the job cluster are matched. In the case described, substitution of a code within the 140300 series would not be acceptable.

- 5. COURSE TITLE. Enter the descriptive title for the course in which the student was enrolled.
- 6. SCHOOL LEGAL ENTITY CODE. Enter the four digit code assigned to the School (Appendix B).
- 7. COURSE TIME COMPLETED IN WEEKS. Enter the total number of calendar weeks of actual training attended. Example: Enrolled September 15, 1969 in a course of training scheduled to terminate on December 19, 1969. Student dropped from training on October 9, 1969. Enter: 4.
- 8. WAS COURSE SUCCESSFULLY COMPLETED? Check "YES" only if the complete course was successfully completed. For any failures or terminations of training prior to the scheduled termination date, check "NO".
- 9. UPON EXIT, IS STUDENT SUITABLE FOR JOB ENTRY? Self-explanatory. However, note that more than skills are implied in the word "suitable".
- 10. IF NOT SUITABLE FOR JOB ENTRY STATE REASON. If "YES" was checked on the previous item, no entry is necessary. If "NO" was checked, enter a concisely stated reason for the negative response.

The essence of vocational training is preparation for employment and anything that detracts from an ex-student's capability or suitability for employment requires identification before corrective measures can be effected. Therefore, completely candid but succinctly stated reasons for the unsuitability for employment displayed by some individuals are solicited. Although not all-inclusive, the following examples are intended as guides to the types of entries desired.

"Insufficiently trained", "Poor work habits", "Emotional instability", "Chronic illness", "Physical impairment", "Misconduct". Excessive shyness, lack of consideration for others, inability to get along with peers or superiors, blame-shifting, and the like, may be recorded as "Defective Personality". Chronic lying, cheating, stealing, a history of delinquency, drug or alcoholic addiction, may be categorized as "Defective Traits of Character".

- 11. IF COURSE WAS NOT COMPLETED, STATE REASON FOR STUDENT'S EXIT.

 No entry is necessary if the course was completed. If not, state
 the reason or reasons concisely.
 - a. By action of school: "Misconduct", "Poor attendance","Failing grades", "Disciplinary problems", etc.
 - b. By action of the student: "Marriage", "Pregnancy", "Moved from area", "Lost interest", "Reasons unknown", etc. (Avoid use of the term "Drop-out" unless the student withdrew from school entirely.)
- 12. STUDENT'S HOME OR FORWARDING ADDRESS AND PHONE NUMBER. Current information is necessary for follow-up.

"VACATION EXIT". As previously stated, interruptions of training such as those resulting from summer vacations cause peculiar accounting problems and induce errors. To eliminate as many difficulties as possible, whenever training is to be interrupted for one or more months, a "Vacation Exit" will be submitted to the RCU. The Form 2 will be employed for this purpose, however, only the first six items of the form will be completed (paragraphs 1 through 6 above). In addition, the word "Vacation" will be printed across the front face of the form.

When training is resumed after the interruption, a new "Entry card", RCU Form 1, will be completed and transmitted to the RCU. (Two year high school vocational courses typify this procedure. Training is interrupted in June at which time a "Vacation Exit" is submitted.

When the student reenrolls in the course of training in September, a new "Entry card" is submitted.)

If after a "Vacation Exit" the student fails to reenroll in the same course of training, a fully executed "Exit card", Form 2, must be submitted to the RCU.

SOCIAL SECURITY NUMBER:	Last Nam		,		DATE OF EXIT: Month	Day Year
COURSE CODE: 6 Digit Code	COURSE TITLE:		•		SCHOOL LEGAL ENTITY CODE:	ration desiration desiration desiration
COURSE TIME COMPLETED IN WEEKS:	SUCC	COURSE ESSFULLY PLETED?	Yes No	STU	ON EXIT, IS DIDENT SUITABLE R JOB ENTRY ?	Yes No
IF NOT SUITABLE FOR JOB ENTRY STATE REASON:						
IF COURSE WAS NOT COMPLETED, STATE REASON FOR STUDENT'S EXIT:						
STUDENT'S HOME OR FORWARDING ADDRESS AND PHONE NUMBER:						
R.C.U. FORM 2 Jan 69	ار دُان رُان و دُان الله الله الله الله الله الله الله ال		M COURSE	n na a ser o la la la caracternagente	DD-U 11207	- 1000年 10

Figure 6

Exit Card, RCU Form 2

VII. FOLLOW-UP

The statistical validity of a follow-up survey may be directly correlated to the number of responses received. Foreknowledge, along with the reasons for the survey and the applications to be made from the results all have been proven efficacious in increasing response ratios. Therefore, it is essential that all vocational students be fully apprised of the importance of their individual and collective responses in effecting improvements in vocational training. Beyond an initial indoctrination into the enrollment/exit/follow-up system shortly after enrollment, reiteration immediately prior to the exit of a student is most important.

Six months after the date of exit from a primary occupational training course, the "Follow-Up Cards", RCU Forms 3a and 3b (Figures 7 & 8, pages 33 & 34), will be transmitted to the ex-student. In the majority of cases, the cards will be mailed as enclosures to a letter of request on school stationery. A pre-stamped, self-addressed envelope shall also be enclosed. The letter should emphasize the need for the information solicited, the necessity for completion of all items on both forms, the anonymity and confidential treatment which will be accorded, and the importance placed upon the ex-students' responses toward progressive curricular improvements. In the event of non-response, the school shall repeat the mailing twice at two week intervals and provide the RCU with a list of non-respondents after the third mailing.

As previously stated, most follow-ups will be conducted by mail, however, Montana's many small school communities afford unique oppor-



and ex-students which are rarely found in large school systems. In such case, better response ratios may be achieved through individualized contacts between the school and former students. Telephone contacts may also be utilized to persuasively induce participation.

The "Follow-Up Cards", RCU Forms 3a and 3b are printed front and back on natural manila stock. Both forms are transmitted to the ex-student on the follow-up six months after exit. While the cards are designed for a simple check-off by the respondent, schools are encouraged to personalize the cards by typing the former student's social security number and last name in the applicable spaces on both cards before mailing.

The Form 3a elicits information on the individual's activities since exit from training; employment, salary, employer information, job-search pattern, etc. The front face of the Form 3b enables the exstudent's opinions on the training program as related to his capabilities in the world-of-work; the reverse side of the Form 3b enables student evaluations of the training curriculum, facilities, and adequacy of instruction.

While schools are encouraged to extract information from the followup cards for their own use, the cards should not be marked, defaced, or unduly delayed in retransmission to the RCU.

The system also envisions follow-ups to be made two and half years and four and a half years after exit. Appropriate forms are under development for these subsequent follow-ups and will be provided in sufficient time for such action.

SOCIAL	LAST	ARE YOU ON ACTIVE DUT	Y OYes
SECURITY NUMBER:	NAME:	IN THE ARMED FORCES?	$\boldsymbol{\times}$
ENROLLED 2 yr College 01	lult Educ. ARE YOU NOW EMPLOYED?	Full-time Self-empl Part-time Unemploye	·
ARE YOU EMPLOYED IN THE OCCUPATION FOR WHICH YOU TRAINED?	IF NOT EMPLOYED IN T FOR WHICH YOU TRAINI EMPLOYED IN A RELAT	ED, ARE YOU No	es not apply
OO YOU BELIEVE YOU Yes WERE HIRED BECAUSE No OF YOUR TRAINING? Does not apply		Retired Other Disability	not apply (Specify)
WHAT IS YOUR CURRENT MONTHLY SALARY? None Below \$299 \$300-399	\$400-499 STATE TITE \$500-599 OF YOUR Above \$600 CURRENT		
HIRED FOR YOUR ADDRESS CURRENT JOB: CURREN	AND COMPLETE S OF YOUR T EMPLOYER:	W 1800	
R.C.U. FORM 3a Jan 69	STUDENT FOLLOW-UP	(Also complete re	verse side)
HAVE YOU HAD SINCE DID YOU	OBTAIN YOUR Less	than 4 weeks Over	24 weeks
HOW DID YOU ACQUIRE School C	ooperative Program Search of nployment Sv Teacher of	Want Ads Union Other	found job Hiring (Specify)
IF YOUR PRESENT JOB DIFFERS FROM YOUR OCCUPATIONAL TRAINING Want	· · · · · · · · · · · · · · · · · · ·	tended to follow occupation d new interests t apply	
		Economic reasons	a
IF YOU DID NOT COMPLETE YOUR TRAINING COURSE STATE REASON: Lost interest Continued enough the jab Is	too difficult gh training for	Marriage Does not apply Other (Specify)	
OMPLETE YOUR Training was RAINING COURSE Obtained enough STATE REASON: the jab I the j	too difficult igh training for wanted	Does not apply Other (Specify) (e:	10671-0

Figure 7

Follow-Up Card, RCU Form 3a

SOCIAL SECURITY NUMBER:			LAST NAME:	a - a tarif an I i i i agus in in mga nga nga nga nga nga nga nga nga nga n		
HOW MUCH DID	TRAINING PROGRAM HELP YOU TO	Ď:	GREAT DEAL	SOME	LITTLE OR NONE	NOT CERTAIN
	Prepare job application forms					
	Prepare for job interviews					
	Find a job					
	· Technically qualify for a job					
	Understand employment problem	s				
	Work with other people					
	Adjust to work responsibilities					
	Know your abilities and interests	•				
	Understand technical information	on				
	Prepare for further training					
R.C.U. FORM	3b Jon 69	STUDENT	FOLLOW UP	00-8 10674-0	(Also camplete	reverse side)

INDICATE ONE RATING FOR EACH OF THE	FOLLOWING IN	YOUR VOCATION	ONAL TRAINING	PROGRAM:
	EXCELLENT	ADEQ UATE	PO OR	VERY POOR
Ability of instructors to teach the course				
Advice and help from Counselors				
Adequacy of classrooms				
Adequacy of Lab or Shop facilities				
Textbooks and instructional material				
Background theory				
Practical application of training to job				
Overall training program				
WHAT ONE SUGGESTION WOULD YOU MAK	E TO BETTER	THE PROGRAM	FOR FUTURE	STUDENTS?
Before mailing, be certain you ha	ve enswered all	questions on both	ides of the forms	

Figure 8

Follow-Up Card, RCU Form 3b

VIII. REPORTS

In addition to providing schools with first-hand follow-up information on their former vocational students, this system will enable the RCU to generate and distribute two basic types of reports.

FEED-BACK REPORT. Twice each year, in January and July, a feed-back report will be compiled and transmitted to each of the participating schools. This report will be accomplished through means of a computer print-out and contain data compiled on vocational students and courses for the previous six month period. Such reports will contain information pertaining only to specific school systems for their own use and will not be subject to general distribution. The proposed format for this report is depicted in figure 9, page 36. Due to problems anticipated in initiating the system, refining data, and "de-bugging" the computer program, the initial feed-back report may be delayed beyond the scheduled date of January 1970.

ANNUAL REPORT. In August of each year an annual report will be compiled and published for general distribution. Such report will contain the major correlations and analyses of the vocational education information contained in the data bank.



FEED-BACK REPORT TO SCHOOLS (each 6 months)

SCHOOL CODE AND NAME OF SCHOOL

Primary Training Code -- Title of Course -- Level of Course (Following information on each training code)

Charles of the construction of the constructio	TNG OU		PLOYED IN EMP		in the state of th
TRAINING PROGRAM HELPED TO:	Great Deal	Some	Little or None	Not Certain	
Prepare job applications Prepare for job interviews Find a job Technically qualify for job Understand employment problems Work with other people Adjust to work responsibilities Know abilities and interests Understand technical information Prepare for further training.		B	responses ch categor	i	
STUDENT RATINGS:	Excell	lent Ad	lequate Po	or Very	}

Ability of instructors Advice and help from counselors Adequacy of classrooms Adequacy of lab or shop facilities Textbooks and instructional material Background theory Practical application of training to job Overall training program

Excellent	Adequate	Poor	Very Poor
T	tal respon	i s es	1
iı	n each cate	egory	
			l j

Figure 9

Formt - Feedback Report



APPENDIX A

VOCATIONAL COURSE CODES

010000 Series AGRICULTURE

01	AGRICULTURE
0101	AGRICULTURAL PRODUCTION
- 	Farm or Ranch Management, General
010101	Hatchery Production
010103	Dairy Production
	Animal Production
	Plant Production
	Farm or Ranch Mechanics
010199	Other (Specify)
0102	AGRICULTURAL SUPPLIES
010201	Agricultural Supplies, General
010202	Agricultural Retail Sales
010203	Agricultural Wholesale Sales
010204	Hay/Feed/Grain - Storage, Sales and Distribution
010204	Agricultural Chemicals
010299	Other (Specify)
0103	AGRICULTURAL MECHANICS
010301	Agricultural Mechanics, General
010302	Agricultural Power Operations and Mechanics
010303	
010305	Agricultural Structures and Utilities
010304	Soil and Water Management
010399	Other (Specify)
0104	AGRICULTURAL PRODUCTS PROCESSING
010401	Agricultural Products Processing, General
	Meat, Fish, Poultry, and Egg Processing
010403	Dairy Products Processing
	Fruits and Vegetables Processing
	Cereal Grain Processing
010403	
010499	Other (Specify)
0105	
010501	Ornamental Horticulture, General
010502	Arboriculture
010503	Floriculture
010504	Nursery Operation
010505	Greenhouse Management
010506	
	Gardening
010599	
010333	Office (phecery)
0106	
010601	Agricultural Resources, General
010602	
010603	Forest Management
010604	-
520001	

010605 Water Management 010606 Fish and Wildlife Management 010607 Recreational Management 010699 Other (Specify) 0107-- FORESTRY 010701 Forestry Technician, General 010702 Timber Cruiser 010703 Fire Control 010704 Slash Control 010705 Reforestation 010706 Timber Scaling 010707 Timber Falling 010708 Timber Heavy Equipment Operator 010709 Timber Truck Driver 010710 Timber Heavy Duty Mechanic Other (Specify) 010799 019900 OTHER AGRICULTURE (Specify)

040000 Series DISTRIBUTIVE EDUCATION

04	DISTRIBUTIVE EDUCATION
0401	ADVERTISING SERVICES
040101	Advertising Services, General
040102	Layouts and Promotion
040199	Other (Specify)
•	
0402	APPAREL AND ACCESSORIES
040201	
040202	Fashion Merchandising
040299	Other (Specify)
0403	AUTOMOTIVE AND PETROLEUM
0403	Automotive Sales and Distribution
040301	
	Automotive Parts Counterman
040303	
040399	Other (Specify)
0404	FINANCE AND CREDIT
040401	
040402	Banking Services
040403	Loan Management
040404	
040405	Credit Management
	Bank Teller
	Loan Clerk
	Credit Clerk
040499	
0405	FOOD DISTRIBUTION
040501	Food Retail Sales
040502	Food Wholesale Sales
040503	Food Sales Clerk
040504	Food Cashier/Checker
040505	Food Route Salesmen
040599	Other (Specify)
0406	FOOD SERVICES
040601	
040602	·
040603	
	Bartender
	Other (Specify)
0.0000	
0407	FOREIGN TRADE
040701	Export/Import Trade, General
040799	Other (Specify)
0408	GENERAL MERCHANDISE
040801	_
040801	- '
0-70002	Dopar chione Door o Daroe

```
040803 General Merchandise Sales
040804 Tourist Sales
040899 Other (Specify)
0409-- HARDWARE, BUILDING MATERIALS, FARM AND GARDEN SUPPLIES,
            AND EQUIPMENT
040901 Hardware Sales
040902 Building Material Sales
040903 Farm and Garden Sales
040904 Wholesale and Contractor Sales
040999 Other (Specify)
0410-- HOME FURNISHINGS
041001 Furniture Sales
041002 Appliance Sales
041003 Fabric Sales
041099 Other (Specify)
0411-- HOTEL AND LODGING
041101 Tourist Services, General
041102 Hotel Management
041103 Motel Management
041199 Other (Specify)
0412-- INSURANCE
041201 Insurance, General
041202 Insurance Sales
041203 Insurance Clerk
041299 Other (Specify)
0413-- SMALL BUSINESS MANAGEMENT
041301 Small Business Management, General
041302 Small Business (Tourist)
041399 Other (Specify)
0414-- MARKETING
041401 Marketing, General
041499 Other (Specify)
0415-- MID-MANAGEMENT
041501 Mid-Management, General
041502 Personnel Services
041503 Production Control and Supervision
041504 Personnel Supervision
041599 Other (Specify)
0416-- REAL ESTATE
041601 Real Estate, General
041602
       Real Estate Agent
041603 Real Estate Appraisal
       Real Estate Clerk
041604
       Other (Specify)
041699
```

0417-- RETAILING 041701 Retailing, General 041799 Other (Specify) 0418-- TRANSPORTATION 041801 Transportation, General 041802 Passenger Transportation 041803 Freight Transportation 041804 Warehousing and Storage Tourist Traffic 041805 Other (Specify) 041899 0419--WHOLESALING 041901 Wholesaling, General 041999 Other (Specify) 049900 OTHER DISTRIBUTIVE EDUCATION (Specify)

070000 Series HEALTH OCCUPATIONS

07	HEALTH OCCUPATIONS
0701	DENTAL SERVICES
	Dental Assistant
070102	Dental Hygienist (Associate Degree)
070103	Dental Laboratory Technician
	Other (Specify)
-	MEDICAL SERVICES
	Cytology Technician
070202	Histology Technician
	Medical Laboratory Technician
	Medical Laboratory Aide
	Nurse (Registered)
0 70206	Nurse (Associate Degree)
	Practical Nurse
	Nurse's Aide
	Inhalation Therapy Technician
070210	
07 0211	Operating Room Technician
070212	Occupational Therapy Aide
070213	Physical Therapy Aide
070214	Electroencephalograph Technician
	Electrocardiograph Technician
-	Home Health Aide
070217	Medical Orderly
	Pharmacy Aide
070219	V
070220	
	Ward Clerk
070299	Other (Specify)
0703	SERVICES
070301	
070302	
070303	
-070304	
07 0305	
070306	
070307	
	Medical Records Librarian
070309	·
070310	
070311	
070399	Other (Specify)
	ALLIED HOSPITAL AND NURSING HOME FACILITY SERVICES
	Central Supply Aide
	Hospital Cook
070403	Dietary Aide



070404 Dietary Clerk
070405 Dietician
070406 Food Service Supervisor
070407 Hospital Engineer
070408 Housekeeper
070409 Laundry Manager
070410 Linen Room Attendant
070411 Maid
070412 Stationary Engineer
070499 Other (Specify)
079900 CTHER HEALTH OCCUPATIONS (Specify)

Note: Job descriptions, educational requirements, and salary information on all of the above named occupations may be found in "Paramedical and Allied Health Service Occupations in Montana" published and distributed by the Research Coordinating Unit, Department of Public Instruction, in September 1968.

090000 Series HOME ECONOMICS

09	HOME ECONOMICS
	CONSUMER & HOMEMAKING
090101	Consumer & Homemaking Education, General
All ite	ms below are Occupational Preparation Courses directed toward g students for gainful employment.
	CARE & GUIDANCE OF CHILDREN
	Child Guidance & Care, General
	Day Care or Nursery Aide
	Playground Aide
	Recreational Center Aide
090299	Other (Specify)
	CLOTHING & TEXTILE MANAGEMENT, PRODUCTION, AND SERVICES
	Clothing & Textiles, General
	Tailoring
	Dressmaking
=	Seamstress
	Alterationist
	Commercial Sewing Machine Operator Drapery Maker
	Clothing Maintenance Specialist
	Laundry/Dry Cleaning
	Other (Specify)
0904	FOOD MANAGEMENT, PRODUCTION, AND SERVICES
090401	Food Services, General
090402	Food Service Supervisor
090403	Restaurant Chef/Cook
090404	Short Order Cook
090405	-
09 0406 090407	Waitress - Waiter Family Dinner Specialist
090407	Caterer's Assistant
090 408	Other (Specify)
09 05	HOME FURNISHINGS, EQUIPMENT, AND SERVICES
0 9 0501	Home Furnishings Sales, General
0 9 0502	Furniture Sales
090503	Appliance Sales
090504	Drapery Sales
090505	Rug Sales
090506	Upholstering Interior Decerating Aide
090507 090599	Interior Decorating Aide Other (Specify)
しゅいづかみ	Orner (Sherria)



O906-- INSTITUTIONAL HOME MANAGEMENT AND SERVICES
O90601 Institutional Home Management, General
O90602 Hotel/Motel Operation
O90603 Housekeeper
O90604 Maid Service - Home, Motel, Hotel
O90605 Institutional Maintenance
O90606 Homemaker's Assistant
O90699 Other (Specify)
O99900 OTHER HOME ECONOMICS (Specify)

140000 Series OFFICE OCCUPATIONS

14	OFFICE OCCUPATIONS
	ACCOUNTING AND COMPUTING
	Accounting/Bookkeeping, General
140102	Junior Accountant
140103	Bookkeeping Assistant
140104	Cashier
140105	Bookkeeping Machine Operator
	Teller
	Credit Clerk
	Other (Specify)
	BUSINESS DATA PROCESSING SYSTEMS
140201	Business Data Processing, General
140202	Systems Analyst
	Computer Programmer
	Computer Operator
	Peripheral Equipment Operator
	Key Punch Operator
	Coding Equipment Operator
	Other (Specify)
1403	FILING, OFFICE MACHINES, AND GENERAL OFFICE CLERICAL
140301	General Office Clerk
140302	File Clerk
140303	Records Clerk
	Office Machine Operator
140305	Reproduction Machine Op era tor
140306	
140399	Other (Specify)
1404	INFORMATION COMMUNICATION
140401	V = -
140402	•
140403	Correspondence Clerk
140404	Mail Clerk
140405	Distribution Clerk
140406	Information Clerk
1 40407	Order Clerk
140408	Billing Clerk
140409	
140410	Librarian
140411	Library Aide
140499	Yan and a second
1405	MATERIALS SUPPORT OCCUPATIONS
140501	
140502	
140503	Stock and Inventory Clerk
140504	
140505	Rate and Transportation Clerk



```
140599 Other (Specify)
1406-- PERSONNEL AND TRAINING
140601 Personnel Assistant
140602 Personnel Clerk
140603 Payroll Clerk
140604 Training Clerk
140605 Interview & Test Technician
140699 Other (Specify)
1407 -- STENOGRAPHIC, SECRETARIAL, AND TYPING
140701 Secretary
140702 Stenographer
140703 Legal Secretary
140704 Clerk Typist
140799 Other (Specify)
1408-- SUPERVISORY AND ADMINISTRATIVE MANAGEMENT
140801 Mid-Management, General
140802 Production Control and Supervision
140803 Personnel Supervision
140899 Other (Specify)
149900 OTHER OFFICE OCCUPATIONS (Specify)
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160000 Series TECHNICAL

Curriculum planners and school officials are cautioned to avoid the trend toward elevating the prestige of a course by adding the word "Technology" to its title without assuring that the course content is sufficient to fully equip the student to meet the technological demands of the labor market.

The U.S. Office of Education definition of "Technology" specifically cites a thorough background in mathematics, science, and an extensive knowledge of a field of specialization, as basic requirements. Further, in describing specific technologies, the U.S.O.E. emphasizes the ability to utilize engineering data in the design of prototypes, pilot models or plants, the demands for systems analysis, testing, and development of maintenance techniques—these attributes are clearly beyond the scope of some courses currently entitled "Technology".

In order to effect a true follow-up correlation between the training and the job obtained by the ex-student, it will be necessary that the level and extent of technological training be accurately ascertained. Therefore, the school concerned will be notified of the specific sub-numbers and titles which will be assigned to the general guidance listing below after the information submitted by the school has been evaluated.

- 1601-- ENGINEERING RELATED TECHNOLOGY (Specify)
- 1602-- AERONAUTICAL TECHNOLOGY (Specify)
- 1603-- AGRICULTURAL TECHNOLOGY (Specify)
- 1604-- ARCHITECTURAL TECHNOLOGY (Specify)
- 1605-- AUTOMOTIVE TECHNOLOGY (Specify)
- 1606-- CHEMICAL TECHNOLOGY (Specify)
- 1607-- CIVIL TECHNOLOGY (Specify)
- 1608-- ELECTRICAL TECHNOLOGY (Specify)
- 1609-- ELECTRONICS TECHNOLOGY (Specify)
- 1610-- ELECTRO-MECHANICAL TECHNOLOGY (Specify)
- 1611-- ENVIRONMENTAL CONTROL TECHNOLOGY (Specify)
- 1612-- INDUSTRIAL TECHNOLOGY (Specify)
- 1613-- INSTRUMENTATION TECHNOLOGY (Specify)
- 1614-- MECHANICAL TECHNOLOGY (Specify)



- 1615-- METALLURGICAL TECHNOLOGY (Specify)
- 1616-- NUCLEAR TECHNOLOGY (Specify)
- 1617-- PETROLEUM TECHNOLOGY (Specify)
- 1618-- SCIENTIFIC DATA PROCESSING TECHNOLOGY (Specify)
- 1619-- FORESTRY TECHNOLOGY (Specify)
- 169900 OTHER TECHNOLOGY (Specify)

170000 Series TRADES & INDUSTRY

17	TRADES AND INDUSTRY
1701	AIR CONDITIONING
170101	Air Conditioning Mechanics, General (Cooling, Heating,
	Ventilating)
170102	Cooling Mechanics
170103	Heating Mechanics
170104	Ventilating Mechanics
170105	Refrigeration Mechanics
170106	Small Motor Repair Mechanics
170107	Duct & Pipework Mechanics (Sheet Metal, Soldering, Welding)
170199	Other Air Conditioning (Specify)
1702	APPLIANCE REPAIR
170201	Appliance Mechanics, General
170202	Large Appliance Service & Repair (Refrigerators, washers, Stoves)
170203	Small Appliance Service & Repair (Toasters, Fans, Motors)
170299	Other Appliance Repair (Specify)
1703	AUTOMOTIVE INDUSTRIES
170301	Auto Mechanics, General
170302	Engine Overhaul Mechanics
170303	Ignition and Electrical Systems Mechanics
170304	Carburetor Mechanics
170305	Brakes & Hydraulics Mechanics
170306	Transmissions Mechanics
170307	Alignment Mechanics
170308	Cooling Systems Mechanics
170309	Accessory Installation Mechanics (Radios, Heaters, Wipers)
170310	Body, Fender, & Glass Repair
170311	Service Station Attendants
170399	Other Automotive (Specify)
1704	AVIATION OCCUPATIONS
170401	
170402	Aircraft Powerplant Mechanics
170403	
170404	Propeller Mechanics
170410	
170411	
170412	
170413	
170414	•
170415	Instrument Repair
170416	
170417	Electrical Systems Mechanics
	Pilot, Private
	Pilot, Commercial
170りつつ	Navigator



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170423 Engineer
170424 In Flight Services
170430 Aviation - Administration
170431 Ground Operation
170432 Ground Power and Heating Units
170499 Other Aviation Occupations (Specify)
1705-- BLUEPRINT READING (Specify)
1706-- BUSINESS MACHINE MAINTENANCE
170601 Office Machine Service and Repair (Typewriter, Adding,
             Duplicating, Calculating)
170602 Computer & Data Processing Equipment Service & Repair
170699 Other Business Machines (Specify)
1707-- COMMERCIAL ART OCCUPATIONS
170701 Commercial Illustrator, General
170702 Fashion Illustrator
170703 Technical Illustrator
170704 Advertising Illustrator
170799 Other Commercial Art (Specify)
1708-- COMMERCIAL FISHERY OCCUPATIONS (Specify)
1709-- COMMERCIAL PHOTOGRAPHY OCCUPATIONS
170901 Photography, General
170902 Photo Laboratory Technician
170903 News Photography
170904 Commercial Photography
170905 Studio Photography
170906 Motion Picture Photography
 170907 Telecasting
 170999 Other Photography Occupations (Specify)
 1710-- CONSTRUCTION & MAINTENANCE TRADES
 171001 Building Trades, General
 171002 Carpentry
 171003 Electricity
 171004 Masonry
 171005 Painting & Decorating
 171006 Plastering
 171007 Plumbing & Pipefitting
 171008 Sheet Metal
 171009 Glazing
 171010 Landscaping
 171011 Ironwork
 171012 Heavy Equipment, General
 171013 Heavy Equipment, Operation
         Heavy Equipment, Repair
 171014
         Highway Construction, General
 171020
         Civil Engineering Aide
 171021
 171022
         Surveying
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Stakesetting

171023

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171024 Rodman
171025 Machine Driller
171026 Engineering Aide
171099 Other Construction (Specify)
1711-- CUSTODIAL SERVICES
171101 Maid Services
171102 Janitorial Services
171103 General Building Services
171199 Other Custodial Services (Specify)
1712-- DIESEL MECHANIC
171201 Diesel Mechanics, General
171202 Pumps & Injection Systems Repair
171203 Heavy Equipment Maintenance & Repair
171299 Other Diesel (Specify)
1713-- DRAFTING OCCUPATIONS
171301 Drafting, General
171302 Mechanical Drafting
171303 Architectural Drafting
171304 Detailing
171399 Other Drafting (Specify)
1714-- ELECTRICAL OCCUPATIONS
171401 Electrical, General
171402 Industrial
171403 Lineman
171404 Motor Repair
171499 Other Electrical (Specify)
1715-- ELECTRONIC OCCUPATIONS
171501 Electronics, General
171502 Communications Electronics Service & Repair
171503 Industrial Electronics Service & Repair
171504 Radio/Television Service & Repair
171599 Other Electronic Occupations (Specify)
1716-- FABRIC MAINTENANCE SERVICES
171601 Fabric Maintenance, General
171602 Dry Cleaning
171603 Laundering
171699 Other Fabric Maintenance (Specify)
1717-- FOREMANSHIP, SUPERVISION, AND MANAGEMENT DEVELOPMENT
 171701 Administrative Management
 171702 Leadership
 171703 Production Control & Supervision
 171799 Other Management (Specify)
         GENERAL CONTINUATION (Specify)
 1718--
        GRAPHIC ARTS OCCUPATIONS
 1719--
        Graphic Arts, General
 171901
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Other Graphic Arts (Specify)

171999

1720-- INDUSTRIAL ATOMIC ENERGY OCCUPATIONS (Specify) 1721-- INSTRUMENT MAINTENANCE & REPAIR OCCUPATIONS 172101 Clock and Watch Repair 172102 Commercial Instrument and Meter Repair 172103 Weights & Measures 172104 Instrumentation 172105 Calibration 172199 Other Instrument Maintenance (Specify) 1722-- MARITIME OCCUPATIONS (Specify) 1723-- METALWORKING OCCUPATIONS 172301 Metalworking, General 172302 Foundry 172303 Machine Shop 172304 Machine Tool Operation 172305 Metal Trades (Combined) 172306 Sheet Metal 172307 Welding, Arc 172308 Welding, Gas 172309 Welding, Combination 172310 Pipewelding 172399 Other Metalworking Occupations (Specify) 1724-- METALLURGY OCCUPATIONS (Specify) 1725-- NUCLEONIC OCCUPATIONS (Specify) 1726-- PERSONAL SERVICES 172601 Barbering 172602 Cosmetology 172699 Other Personal Services (Specify) 1727-- PLASTIC OCCUPATIONS (Specify) 1728-- PUBLIC SERVICE 172801 Fire Fighting 172802 Law Enforcement 172899 Other Public Service (Specify) 1729-- QUANTITY FOOD OCCUPATIONS 172901 Food Production, General 172902 Baker 172903 Cook/Chef 172904 Meat Cutter 172905 Waitress 172906 Institutional Cooking

172999 Other Quantity Food Occupations (Specify)

1730-- REFRIGERATION (Specify)

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1731-- SMALL ENGINE REPAIR, GENERAL
173101 Small Engine Mechanic (Lawnmowers, Rototillers, Chain
             Saws, etc.)
173102 Outboard Engines
173199 Other Small Engine Occupations (Specify)
1732-- STATIONARY ENERGY SOURCE OCCUPATIONS
173201 Electric Power and Generating Plants, General
173202 Pumping Plants
173203 Stationary Engineer
173299 Other Stationary Energy (Specify)
1733-- TEXTILE PRODUCTION AND FABRICATION
173301 Dressmaking
173302 Tailoring
173399 Other (Specify)
1734-- SHOE MANUFACTURING/REPAIR
173401 Leather Work, General
173402 Shoe Repair
173403 Luggage
173404 Belts, Handbags, Wallets
173499 Other (Specify)
1735-- UPHOLSTERING
173501 Upholstering, General
173502 Furniture
173503 Automotive
173599 Other (Specify)
1736-- WOODWORKING OCCUPATIONS
173601 Millwork & Cabinet Making
173699 Other Woodworking (Specify)
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179900 OTHER TRADES & INDUSTRY OCCUPATIONS (Specify)

APPENDIX B

SCHOOL CODE NUMBERS

SCHOOL NAME, LOCATION, & ZIP CODE CODE # -A-Absarokee High School, Absarokee 59001 7501 6501 Anaconda High School, Anaconda 59711 -B-4501 Eainville High School, Bainville 59212 8501 Baker High School, Baker 6502 Beaverhead County High School, Dillon 59725 7502 Belfry High School, Belfry 59008 6503 Belgrade High School, Belgrade 59714 Belt High School, Belt 59412 2501 3501 Big Sandy High School, Big Sandy 59520 7503 Billings Senior High School, Billings 59102 7601 Billings Vo-Tech Center, Billings Billings West High School, Billings 59102 7504 3502 Box Elder High School, Box Elder 6504 Bozeman Public School District #7 (High School), Bozeman 59715 6601 Bozeman Vo-Tech School, Bozeman 59715 7505 Bridger High School, Bridger 59014 7506 Broadview High School, Broadview 59015 6505 Broadwater County High School, Townsend 59664 Browning High School, Browning 59417 2502 6506 Butte High School, Butte 59701 Butte Vo-Tech Center, Butte 59701 6602

-C-

2503 C. M. Russell High School, Great Falls 59401



CODE

SCHOOL NAME, LOCATION, & ZIP CODE

-C-

2504 Cascade High School, Cascade 59421 1501 Charlo High School, Charlo 59824 **3503** Chinook High School, Chinook 59423 2505 Choteau High School, Choteau 59422 **4**502 Circle High School, Circle 59215 6507 Clyde Park High School, Clyde Park 59018 **75**07 Columbus High School, Columbus 59019 **25**06 Conrad High School, Conrad 59423 5501 Corvallis High School, Corvallis 59828 4503 Culbertson High School, Culbertson 59218 Custer High School, Custer **7508** Cut Bank High School, Cut Bank 59427 **25**07 Custer County High School, Miles City 59301 8502

-D-

- 4701 Dawson College, Glendive 59330
- 4504 Dawson County High School, Glendive 59330
- 3504 Denton High School, Denton 59430
- 6508 Drummond High School, Drummond 59832

-F-

- 2508 Fairfield High School, Fairfield 59436
- 4505 Fairview High School, Fairview 59221
- 7509 Fergus County High School, Lewistown 59457
- 1502 Flathead High School, Kalispell 59901
- 1701 Flathead Valley Community College, Kalispell 59901

-F-

- 8503 Forsyth High School, Forsyth 59327
- 2509 Fort Benton High School, Fort Benton 59442
- 7510 Fromberg High School, Fromberg 59029

-G-

- 4506 Glasgow High School, Glasgow 59230
- 2510 Great Falls High School, Great Falls 59401
- 2601 Great Falls Vo-Tech Center, Great Falls 59401

-H-

- 5502 Hamilton High School, Hamilton 59840
- 7511 Hardin High School, Hardin 59034
- 7512 Harlowton High School, Harlowton 59036
- 3505 Havre High School, Havre 59501
- 6509 Helena High School, Helena 59601
- 6603 Helena Vo-Tech Center, Helena 59601
- 5503 Hellgate High School, Missoula 59801
- 4507 Hinsdale High School, Hinsdale 59241
- 7513 Hobson High School, Hobson 59452
- 1503 Hot Springs High School, Hot Springs 59845
- 7514 Huntley Project High School, Worden 59088
- 8504 Hysham High School, Hysham 59038

J

7515 Joliet High School, Joliet 59041

-L-

7516	Laurel	High	School,	Laurel	59044
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- 1504 Libby High School, Libby 59923
- 1505 Lincoln County High School, Eureka 59917

-M-

- 3506 Malta High School, Malta 59538
- 6510 Manhattan High School, Manhattan 59741
- 8701 Miles Community College, Miles City 59301
- 5601 Missoula Vo-Tech Center, Missoula 59801
- 7517 Moore High School, Moore 59464
- 6901 Mountain View School, Helena 59601

-N-

- 4508 Nashua High School, Nashua 59248
- 3801 Northern Montana College, Havre 59501

-0-

4509 Opheim High School, Opheim 59250

-P-

- 6511 Park County High School, Livingston 59047
- 8901 Pine Hills School, Miles City 59301
- 4510 Plentywood High School, Plentywood 59254
- 8505 Plevna High School, Plevna 59344
- 1506 Polson High School, Polson 59860
- 8506 Powder River District County High School, Broadus 59317
- 6512 Powell County High School, Deer Lodge 59722

-R-

7518 Rapelje High School	ol. Rape	el ie	5906/
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- 7519 Red Lodge High School, Red Lodge 59068
- 7520 Roberts High School, Roberts 59070
- 1507 Ronan High School, Ronan 59864
- 7521 Roundup High School, Roundup 59072

-S-

- 3507 Saco High School, Saco 59261
- 1508 St. Ignatius High School, St. Ignatius 59865
- 4511 Scobey High School, Scobey 59263
- 5504 Sentinel High School, Missoula 59801
- 2511 Shelby High School, Shelby 59474
- 6513 Sheridan High School, Sheridan 59749
- 4512 Sidney High School, Sidney 59270
- 2512 Simms High School, Simms 59477
- 5505 Stevensville High School, Stevensville 59870
- 2513 Sunburst High School, Sunburst 59482
- 7522 Sweet Grass County High School, Big Timber 59011

-T-

- 8507 Terry High School, Terry 59349
- 6514 Three Forks High School, Three Forks 59752
- 6515 Twin Bridges High School, Twin Bridges 59754

-V-

- 2514 Valier High School, Valier 59486
- 5506 Victor High School, Victor 59875

-W-

	
6902	Warm Springs State Hospital, Warm Springs 59756
6516	White Sulphur Springs High School, White Sulphur Springs 59645
4513	Wibaux County High School, Wibaux 59353
4514	Wolf Point High School, Wolf Point 59201

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